

REMARKS

35 USC §§102 AND 103

Claims 1, 3, 7, 8 and 31 are rejected under 35 USC §102(b) as being anticipated Allman et al. (US 5100503).

Claims 1, 4-6, 10-15 and 27-28 are rejected under 35 USC §103(a) as being unpatentable over Kennedy et al (US 6506497) in view of Allman et al. (US 5100503).

Claims 1 and 37 are rejected under 35 USC §103(a) as being unpatentable over Kennedy et al (US 6506497) in view of Allman et al. (US 5100503), and further in view of Dammel et al. (US Patent Publication 2004/0166434).

The Applicant respectfully disagrees.

Claim 1 recites:

"An absorbing composition comprising at least one inorganic-based compound, at least one organic-based absorbing compound, and at least one material modification agent, wherein the at least one material modification agent comprises at least one adhesion promoter, at least one crosslinking agent, at least one porogen, at least one catalyst, at least one capping agent, at least one pH tuning agent or a combination thereof, wherein the at least one adhesion promoter comprises APTEOS triflate, APTEOS methanesulfonate, APTEOS nitrate, APTEOS nfbfs, ammonium triflate, ammonium nfbfs, ammonium methanesulfonate, ammonium nitrate, TMAH triflate, TMAH nfbfs, TMAH methanesulfonate. TMAA, TMAN, TMAH nitrate or a combination thereof."

The Examiner contends that claim 1 and 3 are anticipated by Allman, but in fact, the opposite is true. Allman actually teaches against utilizing organic or organic-based absorbing compounds. Column 2, lines 56-62 recite:

"Inorganic dyes such as titanium dioxide,  $\text{Cr}_2\text{O}_3$ ,  $\text{MoO}_4$ ,  $\text{MnO}_4$ , and  $\text{ScO}_4$ , are preferred since they remain stable at temperatures in excess of  $90^\circ\text{C}$ . Organic dyes will generally not remain stable when the spin-on-glass is cured at temperatures of  $350^\circ$ - $500^\circ\text{C}$  and therefore, are not preferred."

So, the Allman reference doesn't merely teach inorganic dyes that don't contain any carbon, but in fact, specifically state why organic dyes don't function properly in contemplated compositions. Therefore, one of ordinary skill in the art isn't going to review the Allman patent and consider producing a composition that contains an organic dye, regardless of the adhesion promoters.

The Allman reference shouldn't be combined with the Kennedy reference or the Dammel reference, because they teach different absorbing compounds. The reason that they teach different absorbing compounds is that they are processed differently and considered for different applications with respect to temperature. No one reading Allman with the inorganic, transition metal based dyes will pick up the Kennedy reference and/or the Dammel reference and consider combining them – especially since Allman teaches against using organic absorbing dyes.

Claim 1 of the present application, and dependent claim 3, both recite clearly organic-based absorbing compositions. Based on this argument, along with others such as that discussed above, Allman does not anticipate or render unpatentable claim 1 of the present application because Allman is missing at least one specific feature or structural recitation found in the present application, and in claim 1. Claim 1 is therefore allowable as not being anticipated by and patentable in view of Allman when treated alone or in combination with Kennedy and/or Dammel. Allman does not anticipate claims 3, 7, 8 or 31

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by virtue of their dependency on claim 1. Further, Kennedy and/or Dammel in combination with Allman doesn't render unpatentable dependent claims 4-6, 10-15 and 27-28 by virtue of their dependency on claim 1.

Claims 1, 3, 7, 11-13, 18, 26, 29-31 and 37 are rejected under 35 USC §103(a) as being unpatentable in view of US Patent 6677392 (Ravichandran et al) in view of Hayashi et al (US Patent Publication No. 2003/0091838). The Applicant respectfully disagrees.

Claim 1 recites:

"An absorbing composition comprising at least one inorganic-based compound, at least one organic-based absorbing compound, and at least one material modification agent, wherein the at least one material modification agent comprises at least one adhesion promoter, at least one crosslinking agent, at least one porogen, at least one catalyst, at least one capping agent, at least one pH tuning agent or a combination thereof, wherein the at least one adhesion promoter comprises APTEOS triflate, APTEOS methanesulfonate, APTEOS nitrate, APTEOS nfb, ammonium triflate, ammonium nfb, ammonium methanesulfonate, ammonium nitrate, TMAH triflate, TMAH nfb, TMAH methanesulfonate, TMAA, TMAN, TMAH nitrate or a combination thereof."

Claim 1 recites an absorbing composition that comprises several components recited above. The Ravichandran reference has been exhaustively discussed in earlier responses to Office Actions, and therefore, the question is whether the Hayashi reference is proper to combine with Ravichandran. The Applicants contend that it is not, because each reference is discussing compositions that are utilized for different purposes. Hayashi's compositions do not disclose absorbing compounds; and therefore, it is entirely reasonable that one of ordinary skill in the art wouldn't read Hayashi and assume that a combination with Ravichandran is appropriate. Ravichandran does not disclose or teach that ammonium salts or other amine-based compounds can even be utilized in the compositions taught therein as material modification agents. This combination appears to be an inappropriate combination based on hindsight and not because either reference

indicated that a combination or additional embodiment was desired or necessary.

The Federal Circuit has stated that "[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." (See *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). The Patent Office applies the same standard. "When the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why combination of the reference teachings is proper...Absent such reasons or incentives, the teachings of the references are not combinable." (See *Ex parte Skinner*, 2 USPQ2d 1788, 1790 (BPAI 1986). The Federal Circuit crystallizes this concept by the following ruling:

"It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" (See *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)).

Close adherence to this standard is especially important in the case of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against the teacher." (See *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citing *W. L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)). In addition, a general relationship between fields of the prior art patents to be combined is insufficient to establish the suggestion or motivation. (See *Interactive Techs., Inc. v. Pittway Corp.*, Civ. App. No.: 98-1464, slip op. at 13 (Fed. Cir.

June 1, 1999)(unpublished), cert. denied. 528 U.S. 1046 (1999). As stated by the Federal Circuit:

"The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some "teaching, suggestion or reason" to combine cited references... When the art in question is relatively simple, as is the case here, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously." (McGinley v. Franklin Sports Inc., 262 F.3d 1339, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001)(citing Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579. 42 USPQ2d 1378, 1383 (Fed. Cir. 1997)).

Failure of the Examiner to provide the necessary suggestion or motivation will create a presumption that the combination of references selected by the Examiner to support the obviousness rejection was based on hindsight. (Irah H. Donner, *Patent Prosecution, Practice & Procedure Before the U.S. Patent Office*, Third Edition) In this case, the Examiner fails to point out how one of ordinary skill in the art would read Ravichandran and assume that a reference (Hayashi) containing no absorbing compounds and a desire to form insulating layers would be an obvious combination reference.

Based on this argument, along with others such as that discussed above, Ravichandran in combination with Hayashi does not render unpatentable claim 1 of the present application. Further, Ravichandran in combination with Hayashi does not render unpatentable claims 3, 7, 11-13, 18, 26, 29-31 and 37 by virtue of their dependency on claim 1.

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REQUEST FOR ALLOWANCE

Claims 1, 3-15, 18, 26-31 and 37 are pending in this application. The applicants request allowance of all pending claims.

Respectfully submitted,  
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Dated: December 4, 2008

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